

Claims

1. A seed tape (1) including successively arranged germinating units (1a, 1b, 1c), and which further includes at least one carrier strip (2, 4) as well as at least one layer (3) of biodegradable, gas-permeable material which is flexible and non-woven and arranged  
5 on said carrier strip, whereby the layer (3) is optionally locally interrupted a short distance along the seed tape, and whereby each germinating unit (1a, 1b, 1c) includes a mixture of carrier (7), at least one additive (8) which is wate-absorbing and optionally an adjuvant (9) in addition to one or more seeds (10), as well as whereby said seed tape is optionally cut into separate germinating units prior to the irrigation and/or the bed-  
10 ding out, c h a r a c t e r i s e d in that the layer (3) of biodegradable, gas-permeable material which is flexible and non-woven, and is made of polylactide (PLA) or a material including said polylactide, or is made of rayon, viscose or polylactide plus starch.
2. A seed tape as claimed in claim 1, c h a r a c t e r i s e d in that the PLA-fibres present a slightly creased structure.

3. A seed tape as claimed in claim 1, characterised in that super absorbing polymer (SAP) grains or SAP fibres (8) are arranged around and adjacent the seed (10), said SAP grains or SAP fibres being retained by means of an adhesive effect resulting  
5 from an ultrasound or heat treatment of the non-woven material.
4. A seed tape as claimed in claim 1, characterised in that the carrier strip (2, 4) is made of PLA, such as non-woven PLA.
5. A seed tape as claimed in one or more of the claims 1-4, characterised in that the non-woven PLA material (3) presents a needle structure and is structured as a  
10 sandwich with three crossed layers, where the middle layer includes relatively thin fibres and the two outer layers include fibres being thicker than the fibres of the middle layer.
6. A seed tape as claimed in claim 3, in which the SAP grains or SAP fibres (8) are retained adjacent the seed (10), characterised in that said grains or fibres are  
15 retained by being glued onto the non-woven layer (3) by means of additional glue, preferably biodegradable natural glue, such as a starch, gelatine or sugar-based glue.

7. A seed tape as claimed in one or more of the claims 1 to 6, characterised in that each germinating unit (1a, 1b, 1c) is delimited by two spaced transverse spot or line weldings (16), and that at least two relatively short auxiliary weldings (17) are provided between the spot or line weldings (16), said auxiliary weldings projecting inwards from the side edges (18) of each seed tape and being of a length (a) of 0.05 to 0.20 times the width (b) of the seed tape.
8. A seed tape as claimed in claim 7, characterised in that the spot or line weldings are provided at a temperature of 70 to 110°C.
9. A seed tape as claimed in one or more of the claims 1 to 6, characterised in that the fibres of each non-woven layer (3) are of a length of 5 to 9 cm.
10. A seed tape as claimed in one or more of the claims 1 to 9, characterised in that the biodegradable, gas-permeable, flexible, non-woven layer (3) is formed by a row of pockets (3') of non-woven polylactide (PLA) fastened to the carrier strip (2') at an equidistant distance, and where each pocket includes a seed.
11. A seed tape as claimed in any of the preceding claims, characterised in

that the flexible non-woven PLA layer (3) is of a weight of 10 to 40 g/m<sup>2</sup>.

12. A seed tape as claimed in claim 11, and where the seeds are preferably sugar beet seeds, characterised in that each germinating unit (1a, 1b, 1c) is delimited by  
5 a circumferential welded seam (26), which is locally interrupted in order to provide an opening (27) through which radicles and seedlings can advance.

13. A seed tape as claimed in one or more of the claims 1 to 12, characterised in that that it contains paper-like pieces (21a, 23, 27a) produced by placing paper pulp, optionally cellulose fibres, SAP-crystals (8) and grains of carrier (7) and  
10 adjuvants (9) for instance on the surface of a suction cylinder by means of air.

14. A seed tape as claimed in claim 13, characterised in that the adjuvants (9), such as pesticides, are placed in a small capsule (22) in each germinating unit (1a, 1b, 1c).

15. A seed tape as claimed in any of the preceding claims, characterised in that the flexible non-woven PLA-layer (3) presents a suction capacity of 0 to 30 mm, for instance 5 to 15 mm.

16. A seed tape as claimed in claim 1, characterised in that the water-absorbing additive or additives (8), such as SAP, and optionally adjuvants (9), such as pesticides, can be absorbed in or adhered to a blotting paper piece (27) optionally provided with a plastic coating, such as a PLA-coating, for a slow release of additive and/or adjuvant, said blotting paper piece (27) being placed inside each germinating unit (1a, 1b, 1c) and for instance resulting from a cutting off from a high speed produced roll of blotting paper, such as at 500 m/min, where the above water-absorbing additive (8) and adjuvant (9), if any, are sucked into or glued onto said blotting paper piece.